

APPENDIX A

ApXML Structure

Format

- The ApXML file should start with a processing instruction specifying the version
- The ApXML file should contain a comment specifying the origin of the file.
- ApXML is case-sensitive. By convention all ActiveProject v2000-defined element and attribute names will be uppercase. All ApXML element and attribute name values and enumerated types are defined for C++ in the file *FtcXMLInclude.h*.
- Simple values will be defined as attributes of an element. Complex values (structures) will be defined as sub-elements
- The first element (document element) in the ApXML file must be either a *PROJECT*, *FACE* or *FACETARGET*.
 - **Creating a new project in a project area.** The first element must be a *PROJECT* element. At least one *FACE* sub-element is required. The target object should be NULL when calling *IAuthoringEngine::NewFrom*.
 - **Building an assembly in an existing project.** The first element must be a *FACE* element. The target object should be a reference to the container face when calling *IAuthoringEngine::NewFrom*.
 - **Building a flat assembly in an existing project.** The first element must be a *FACETARGET* element. The target object should be a reference to the existing face that will become the assembly root face when calling *IAuthoringEngine::NewFrom*.
 - **Adding just users to a project area.** The first element must be a *PROJECT* element. All sub-elements should be *USER* elements. If a *FACE* sub-element is defined, a project will be created as well as adding users. The target object should be NULL when calling *IAuthoringEngine::NewFrom*.

- Definitions of color are RGB values.
- There may be one *PROCESSSUPPORT* element as a child of the first element. This element includes any attributes related to processing the ApXML file. Currently, there is only one attribute defined, MESSAGE, which defines the message displayed with the progress bar during import.
- Any assembly that supports the Republish operation must include a custom property “XMLRef” for each object that may be republished. The property must define a unique value for each object and generate the same value for the same object for each republish. This value identifies the object for updating as opposed to adding or deleting.
 - **Note.** During a republish operation objects identified as existing through the “XMLRef” property are updated with values defined in the ApXML document. All other attributes of the objects remain unchanged.
- Inter-object referencing in an ApXML document is supported by the XMLID attribute of any element. When generating an ApXML document each element that may be referenced must define the XMLID attribute and assign it a value that is unique within the ApXML document.
 - The *RERERENCETORESOLVE* element must be child of the first element. Each *RERERENCETORESOLVE* element defines an XMLID value that must be resolved to an object handle on the import to ActiveProject. Requiring the ApXML document to specifically identify inter-object references limits potential scalability problems when importing very large ApXML documents by not maintaining an id list for every ApXML element with an XMLID.
- **Legacy attributes** are reserved attributes that should not be used in normal ApXML definitions. They are reserved for recreating existing projects and project data (for example the translation of v5.0.2 projects). Their use circumvents the standard API operations for setting user and date stamps for transactions.

- An *INFOITEM* sub-element of type `FD_litHistory` defined as a child of an *INFOITEM* element will be added as a history version of the parent info item. For legacy use only. Not to be used in normal operations.

APPENDIX B

APXML ELEMENT TAGS

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
ANNOTATIONGRAPHIC	TYPE FD_LGTPUnknown = 0 FD_LGTPText = 1 FD_LGTPLine = 2 FD_LGTPEllipse = 3 FD_LGTPRectangle = 4 FD_LGTPPolygon = 5 FD_LGTPFile = 6 LINEPATTERN FD_LGLPNoLine = 0 FD_LGLPSolid = 1 FD_LGLPDash = 2 FD_LGLPDot = 3 FD_LGLPDashDot = 4 FD_LGLPDashDotDot = 5 LINEWIDTH LINEARROWBEGIN FD_LGNo = 0 FD_LGYes = 1 LINEARROWEND FD_LGNo = 0 FD_LGYes = 1 LINECOLOR FILLPATTERN FD_LGFPNoFill = 0, FD_LGFPSolid = 1, FD_LGFPHorizontalLine = 2, FD_LGFPPVerticalLine = 3, FD_LGFPPDiagonalDownward = 4, FD_LGFPPDiagonalUpward = 5, FD_LGFPCrossHatch = 6, FD_LGFPPDiagonalCrossHatch = 7 FILLFOREGROUNDColor FILLBACKGROUNDColor ROW (Y) COLUMN (X) WIDTH	POLYPOINT +

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
	<p>HEIGHT</p> <p>TEXT (for text type)</p> <p>JUSTIFICATION</p> <p> LEFT = 0 (default)</p> <p> RIGHT = 1</p> <p> CENTER = 2</p> <p>FONT</p> <p>SIZE</p> <p>FontCOLOR</p> <p>STYLE</p> <p> FD_LGBold = 1</p> <p> FD_LGItalic = 2</p> <p> FD_LGUnderline = 4</p> <p>FILENAME (for type File)</p> <p>ORIGINALREF (for type File)</p> <p>CURRENTDIR (where master file and all dependencies currently stored, may be relative)</p> <p>ZINDEX (optional, z-order index relative to other graphics, ANNOTATIONGRAPHIC and LOOKGRAPHIC, of the container FACE)</p>	

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
ARTICLE	XMLID (unique reference in XML file) NAME DESCRIPTION EDITID POSITION REFERENCE (path for graphics file) URL (associated url for article)	
ATTRIBUTE	NAME	VALUE
AUTHOR	NAME	
CCUSER	USER DATE (as Variant Time)	
COMMENT	XMLID (unique reference in XML file) NAME DESCRIPTION TYPE FD_GUnknown = 0 FD_GStandard = 1 FD_GMarkup = 2 URGENT FD_LGNo = 0 FD_LGYes = 1 REFERENCE (optional file path) == Legacy Attributes ===== DATE (as Variant Time) USER	
CROSSREFERENCE	XMLID	

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
CUSTOMPROP	XMLID (unique reference in XML file) NAME DESCRIPTION VALUE TYPE CP_Empty = 1 CP_Long = 2 CP_Double = 3 CP_Text = 4 CP_Handle = 5 CP_Date = 6 CP_Currency = 7 CP_List = 9 CP_Bool = 10	CUSTOMPROP +
DEPENDENCY	FILENAME (original path)	
FACE	XMLID (unique reference in XML file) NAME DESCRIPTION NAVIGATIONMODE FD_NmNone = 0 FD_NmSelect = 1 FD_NmContents = 2 FD_NmLaunch = 4 SPECIALTYPE FD_FtNone = 0 FD_FtStandard = 1 FD_FtPublishedhierarchyContainer = 2 FD_FtPublishedHierarchyRoot = 4 ASPECTTYPE FD_AtStandard = 1 FD_AtNavigateToUrl = 2 FD_AtTComm = 4 FD_AtNews = 8 FD_AtCrossRefs = 16 FD_AtTeam = 32 NAMEASPECTSPECIFIC BACKGROUNDCOLOR (optional)	FACE + LOOKGRAPHIC ANNOTATIONGRAPHIC + CUSTOMPROP + INFO ITEM + COMMENT + ISSUE + TCOMMTYPE SUBSCRIBER + PUBLISHER + (valid only for root face) REVIEWER + (valid only for root face) VIEWER + (valid only for root face) XMLIDTORESOLVE + (valid only for face as root element) PROCESSSUPPORT (valid only for face as root element)

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
FACE TARGET	XMLID (unique reference in XML file) BACKGROUND COLOR (optional)	FACE + ANNOTATION GRAPHIC + CUSTOMPROP + INFO ITEM + COMMENT + PROCESS SUPPORT (valid only for face as root element)
FIELDVALUE	VALUE	
HOME PAGE	GRAPHIC (file path) COMPANYURL COMPANYLABEL COMPANYGRAPHIC (file path) EMAILADDRESS EMAILLABEL	

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ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
INFOITEM	XMLID (unique reference in XML file) NAME DESCRIPTION DOCTYPE FD_DtUnknownModule = 0 FD_DtUrlService = 1 FD_DtFileService = 2 FD_DtCadService = 3 FD_DtCgiService = 4 FD_DtWrkPkgService = 5 DOCSUBTYPE TYPE FD_IitAll = 0 FD_IitNormal = 1 FD_IitHistory = 2 FD_IitGraphic = 4 FD_IitSubmitAttachment = 8 FD_IitResponseAttachment = 16 FD_IitCommentAttachment = 32 FD_IitTemporary = 64 FD_IitArticleRefUrl = 128 PROCESSTYPE FD_MtInfoItemProcessor = 8193 FD_MtHierarchyProcessor = 8194 FD_MtFlatHierarchyProcessor = 8195 FD_MtMarkupProcessor = 8196 FD_MtScheduleProcessor = 8197 SOURCEREF CURRENTDIR (current directory for file, usually relative) SHARE MASTERFILENAME == Legacy Attributes ===== OWNER PUBLISHER DATE (as Variant Time) PUBLICATIONNUMBER	CUSTOMPROP + DEPENDENCY + COMMENT + INFOITEM +

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
ISSUE	XMLID (unique reference in XML file) NAME EDITOR PUBLISHED FD_LGNo = 0 FD_LGYes = 1 == Legacy Attributes ===== PUBLISHER DATE (as Variant Time)	ARTICLE +
LABEL	HIDDEN FD_LGNo = 0 FD_LGYes = 1 TEXT ROW (Y) COLUMN (X) HEIGHT WIDTH FONT FONTCOLOR STYLE FD_LGBold = 1 FD_LGItalic = 2 FD_LGUnderline = 4 SIZE LINEPATTERN FD_LGLPNoLine = 0 FD_LGLPSolid = 1 FD_LGLPDash = 2 FD_LGLPDot = 3 FD_LGLPDashDot = 4 FD_LGLPDashDotDot = 5 LINEWIDTH LINECOLOR FILLPATTERN FD_LGFPNoFill = 0, FD_LGFPSolid = 1, FD_LGFPHorizontalLine = 2, FD_LGFPPVerticalLine = 3,	

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
	FD_LGFPDiagonalDownward = 4, FD_LGFPDiagonalUpward = 5, FD_LGFPCrossHatch = 6, FD_LGFPDiagonalCrossHatch = 7 FILLFOREGROUNDCOLOR FILLBACKGROUNDCOLOR JUSTIFICATION FD_LGLeft = 0 (default) FD_LGRight = 1 FD_LGCenter = 2 AUTOPOSITION FD_LGAPNone = 0 (default) FD_LGAPCenter = 1 FD_LGAPLeft = 2 FD_LGAPRight = 3 FD_LGAPTop = 4 FD_LGAPBottom = 5	

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
LOOKGRAPHIC	<p>TYPE</p> <p>FD_LGTPUnknown = 0</p> <p>FD_LGTPEllipse = 3</p> <p>FD_LGTPRectangle = 4</p> <p>FD_LGTPPolygon = 5</p> <p>FD_LGTPFile = 6</p> <p>LINEPATTERN</p> <p>FD_LGLPNoLine = 0</p> <p>FD_LGLPSolid = 1</p> <p>FD_LGLPDash = 2</p> <p>FD_LGLPDot = 3</p> <p>FD_LGLPDashDot = 4</p> <p>FD_LGLPDashDotDot = 5</p> <p>LINEWIDTH</p> <p>LINEARROWBEGIN</p> <p>FD_LGNo = 0</p> <p>FD_LGYes = 1</p> <p>LINEARROWEND</p> <p>FD_LGNo = 0</p> <p>FD_LGYes = 1</p> <p>LINECOLOR</p> <p>FILLPATTERN</p> <p>FD_LGFPNoFill = 0,</p> <p>FD_LGFPSolid = 1,</p> <p>FD_LGFPHorizontalLine = 2,</p> <p>FD_LGFPPVerticalLine = 3,</p> <p>FD_LGFPPDiagonalDownward = 4,</p> <p>FD_LGFPPDiagonalUpward = 5,</p> <p>FD_LGFPCrossHatch = 6,</p> <p>FD_LGFPPDiagonalCrossHatch = 7</p> <p>FILLFOREGROUNDCOLOR</p> <p>FILLBACKGROUNDCOLOR</p> <p>ROW (Y)</p> <p>COLUMN (X)</p> <p>WIDTH</p> <p>HEIGHT</p> <p>SHOWNAVIGATETOCONTENTS</p> <p>FD_LGSNone = 0,</p> <p>FD_LGSRightBottom = 1,</p> <p>FD_LGSBottomCenter = 2,</p>	<p>LABEL</p> <p>DEPENDENCY +</p> <p>POLYPOINT +</p> <p>PLACEICON</p>

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
	FD_LGSBottomLeft = 3, FD_LGSLeftCenter = 4, FD_LGSLeftTop = 5, FD_LGSTopCenter = 6, FD_LGSTopRight = 7, FD_LGSRightCenter = 8, FD_LGSCenter = 9, FD_LGSManualPlace = 10 (use PLACEICON) FILENAME (for type File) ORIGINALREF (for type File) CURRENTDIR (where master file and all dependencies currently stored, may be relative) ZINDEX (optional, z-order index relative to other graphics, ANNOTATIONGRAPHIC and LOOKGRAPHIC, of the container FACE)	

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
PARAMETER	XMLID (unique reference in XML file) NAME DESCRIPTION PARAMETER TYPE	VALUE ATTRIBUTE +
PLACEICON	XOFFSET YOFFSET ICONNAME (MAGNIFYINGGLASS, PLUSIGN, FOLDER) or ICONFILENAME	
POLYPOINT	ROW (Y) COLUMN (X)	
PROCESSSUPPORT	MESSAGE	
PROJECT	XMLID (unique reference in XML file) NAME DESCRIPTION INFOITEMPREVIEWWIDTH INFOITEMPREVIEWHEIGHT INFOITEMVERSIONSLIMIT INCLUDEWEBCONFERENCING FD_LGNo = 0 FD_LGYes = 1	FACE + CUSTOMPROP + INFOITEM + USER + AUTHOR + XMLIDTORESOLVE + HOMEPAGE PROCESSSUPPORT
PUBLISHER	NAME	
XMLIDTORESOLVE	XMLID	
REVIEWER	NAME	
SUBSCRIBER	NAME	

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
TCOMM	XMLID (unique reference in XML file) NAME DESCRIPTION FROM TO ISNEW FD_LGNo = 0 FD_LGYes = 1 ISCOMPLETE FD_LGNo = 0 FD_LGYes = 1 REQUIREDDATE (as Variant Time) OBJECT (XMLID) OBJECTREFERENCE DESCRIPTIONREFERENCE == Legacy Attributes ===== SUBMITDATE (as Variant Time) RESPONSEDATE (as Variant Time) RESPONSE RESPONSEREFERENCE	FIELDVALUE + TRANSFERUSER + CCUSER +
TCOMMFIELD	NAME FIELDREQUIRED FD_LGNo = 0 FD_LGYes = 1	
TCOMMTYPE	XMLID (unique reference in XML file) NAME DESCRIPTION LONGNAME CUSTOMDATA (BSTR) RECIPIENTNAME	TCOMMFIELD+ TCOMM +
TRANSFERUSER	== Legacy Attributes ===== USER DATE (as Variant Time)	

ELEMENT TAG	ATTRIBUTES	CHILD ELEMENT TAGS
USER	XMLID (unique reference in XML file) NAME PASSWORD EMAIL FIRSTNAME LASTNAME TELEPHONE TITLE COMPANY URL ADDRESS CITY STATE ZIP PAGER COUNTRY EXT FAX MOBILE GROUP (non-zero plus USERNAME indicates a group)	USERNAME +
USERNAME	NAME	
VALUE	TYPE CP_Empty = 1 CP_Long = 2 CP_Double = 3 CP_Text = 4 CP_Handle = 5 CP_Date = 6 CP_Currency = 7 CP_List = 9 CP_Bool = 10 VALUE	
VIEWER	NAME	

XML FILE EXAMPLES

NEW PROJECT

```
<?xml version="1.0"?>
<!--Project export from ActiveProject Server Version 5.0-->
<PROJECT XMLID="firefox:#1" NAME="firefox" INFOITEMPREVIEWWIDTH="275"
INFOITEMPREVIEWHEIGHT="0" INFOITEMVERSIONSLIMIT="5" INCLUDEWEBCONFERENCING="0"
DESCRIPTION="FireFox Project Web Site">
  <USER XMLID="FM_User:pames" NAME="pames" PASSWORD="pames"
  EMAIL="pames@frametech.com" FIRSTNAME="Paul" LASTNAME="Ames"
  TELEPHONE="603 448-3009" TITLE="Lead Slug" COMPANY="Framework
  Technologies" URL="http://www.frametech.com" ADDRESS="85 Mechanic Street"
  CITY="Lebanon" STATE="NH" ZIP="03766" GROUP="0"/>

  <USER XMLID="FM_User:btrexler" NAME="btrexler" PASSWORD="b%btrexler%"
  EMAIL="btrexler@frametech.com" FIRSTNAME="Bill" LASTNAME="Trexler"
  TELEPHONE="603 448-3009" TITLE="Account Manager" COMPANY="Framework
  Technologies" URL="http://www.frametech.com" ADDRESS="85 Mechanic Street"
  CITY="Lebanon" STATE="NH" ZIP="03766" GROUP="0"/>

  <USER XMLID="FM_User:cdavies" NAME="cdavies" PASSWORD="$c$davies"
  EMAIL="cdavies@frametech.com" FIRSTNAME="Chris" LASTNAME="Davies"
  TELEPHONE="603 448-3009" TITLE="Sales Engineer" COMPANY="Framework
  Technologies" URL="http://www.frametech.com" ADDRESS="85 Mechanic Street"
  CITY="Lebanon" STATE="NH" ZIP="03766" GROUP="0"/>

  <HOMEPAGE COMPANYURL="http://www.frametech.com" COMPANYLABEL="Framework
  Technologies" EMAILADDRESS="mailto:cdavies@frametech.com"
  EMAILLABEL="Email to Project Manager"/>

  <AUTHOR NAME="cdavies"/>

  <AUTHOR NAME="btrexler"/>

  <FACE XMLID="firefox:#3047" NAME="News" DESCRIPTION="" NAVIGATIONMODE="4"
  SPECIALTYPE="1" ASPECTTYPE="8" BACKGROUNDCOLOR="16777215">

    <PUBLISHER NAME="cdavies"/>

    <VIEWER NAME="pames"/>

    <INFOITEM XMLID="firefox:#3050" NAME="News Service" DESCRIPTION=""
    SOURCEREF="http:commonservices/newsservice/news.asp?Project=firefo
    x&Aspect=News" DOCTYPE="1" TYPE="1" OWNER="cdavies"
    PUBLISHER="cdavies" DATE="25568.7916666667"
    PUBLICATIONNUMBER="0"/>

    <ISSUE XMLID="FTC500" NAME="cdavies" EDITOR=""/>

  </FACE>

  <FACE XMLID="firefox:#5" NAME="Overview" DESCRIPTION=""
  NAVIGATIONMODE="1" SPECIALTYPE="1" ASPECTTYPE="1"
  BACKGROUNDCOLOR="16777215">

    <PUBLISHER NAME="btrexler"/>
    <REVIEWER NAME="cdavies"/>

    <ANNOTATIONGRAPHIC ZINDEX="0" FILENAME="OVER.JPG"
    ORIGINALREF="D:\PROGRAM FILES\FTC\ACTIVEPROJECT
```

```
SERVER\UTILITY\FIREFOX\PROJECT\DOCS\OVER.JPG" CURRENTDIR="docs"
TYPE="6" FILLPATTERN="1" FILLFOREGROUNDCOLOR="0"
FILLBACKGROUNDCOLOR="376926741" WIDTH="457" HEIGHT="319" ROW="0"
COLUMN="0"/>
```

```
<FACE XMLID="firefox:#150" NAME="Goals" DESCRIPTION=""
NAVIGATIONMODE="1" SPECIALTYPE="1" ASPECTTYPE="1"
BACKGROUNDCOLOR="16777215">
```

```
<LOOKGRAPHIC ZINDEX="2" TYPE="6" CURRENTDIR="\_APIgraphic"
ORIGINALREF="d:\Program Files\FTC\ActiveProject
Server\Utility\firefox\project\XMLEXPORT\_APIgraphic\#150.b
mp" FILENAME="#150.bmp" WIDTH="127" HEIGHT="36" ROW="41"
COLUMN="404">
```

```
<LABEL TEXT="Goals" FONT="Arial" SIZE="9"
FONTCOLOR="16777215" STYLE="1" LINEPATTERN="0"
FILLPATTERN="0" WIDTH="121" HEIGHT="22" ROW="44"
COLUMN="405"/>
```

```
</LOOKGRAPHIC>
```

```
<SUBSCRIBER NAME="btrexler"/>
```

```
<INFOITEM XMLID="firefox:#3486" NAME="additional FAQ's"
DESCRIPTION="" SOURCEREF="D:\FJB\FIREFOX\DOCS\ADDITIONAL
FAQ'S.DOC" CURRENTDIR="docs" MASTERFILENAME="ADDITIONAL
FAQ'S.DOC" DOCTYPE="2" TYPE="1" OWNER="Javier Betancourt"
PUBLISHER="Javier Betancourt" DATE="-1.#QNAN"
PUBLICATIONNUMBER="1"/>
```

```
</FACE>
```

```
<FACE XMLID="firefox:#158" NAME="Teams" DESCRIPTION=""
NAVIGATIONMODE="1" SPECIALTYPE="1" ASPECTTYPE="1"
BACKGROUNDCOLOR="16777215">
```

```
<LOOKGRAPHIC ZINDEX="3" TYPE="6" CURRENTDIR="\_APIgraphic"
ORIGINALREF="d:\Program Files\FTC\ActiveProject
Server\Utility\firefox\project\XMLEXPORT\_APIgraphic\#158.b
mp" FILENAME="#158.bmp" WIDTH="127" HEIGHT="36" ROW="112"
COLUMN="405">
```

```
<LABEL TEXT="Teams" FONT="Arial" SIZE="9"
FONTCOLOR="16777215" STYLE="1" LINEPATTERN="0"
FILLPATTERN="0" WIDTH="121" HEIGHT="22" ROW="115"
COLUMN="406"/>
```

```
</LOOKGRAPHIC>
```

```
<INFOITEM XMLID="firefox:#3402" NAME="SEC Reports"
DESCRIPTION="" SOURCEREF="D:\FJB\FIREFOX\DOCS\SEC REPORTS
FOR CISCO.URL" CURRENTDIR="docs" MASTERFILENAME="SEC
REPORTS FOR CISCO.URL" DOCTYPE="2" TYPE="1" OWNER="Javier
Betancourt" PUBLISHER="Javier Betancourt" DATE="-1.#QNAN"
PUBLICATIONNUMBER="1"/>
```

```
</FACE>
```

```
<FACE XMLID="firefox:#166" NAME="Quality" DESCRIPTION=""
NAVIGATIONMODE="1" SPECIALTYPE="1" ASPECTTYPE="1"
BACKGROUNDCOLOR="16777215">
```

```
<LOOKGRAPHIC ZINDEX="4" TYPE="6" CURRENTDIR="\_APIgraphic"
ORIGINALREF="d:\Program Files\FTC\ActiveProject
```

```
Server\Utility\firefox\project\XMLEXPORT\_APIgraphic\#166.b
mp" FILENAME="#166.bmp" WIDTH="127" HEIGHT="36" ROW="146"
COLUMN="405">
```

```
<LABEL TEXT="Quality" FONT="Arial" SIZE="9"
FONTCOLOR="16777215" STYLE="1" LINEPATTERN="0"
FILLPATTERN="0" WIDTH="121" HEIGHT="22" ROW="149"
COLUMN="406"/>
```

```
</LOOKGRAPHIC>
```

```
</FACE>
```

```
<FACE XMLID="firefox:#174" NAME="Other" DESCRIPTION=""
NAVIGATIONMODE="1" SPECIALTYPE="1" ASPECTTYPE="1"
BACKGROUNDCOLOR="16777215">
```

```
<LOOKGRAPHIC ZINDEX="5" TYPE="6" CURRENTDIR="\_APIgraphic"
ORIGINALREF="d:\Program Files\FTC\ActiveProject
Server\Utility\firefox\project\XMLEXPORT\_APIgraphic\#174.b
mp" FILENAME="#174.bmp" WIDTH="127" HEIGHT="36" ROW="180"
COLUMN="405">
```

```
<LABEL TEXT="Other" FONT="Arial" SIZE="9"
FONTCOLOR="16777215" STYLE="1" LINEPATTERN="0"
FILLPATTERN="0" WIDTH="121" HEIGHT="22" ROW="183"
COLUMN="406"/>
```

```
</LOOKGRAPHIC>
```

```
</FACE>
```

```
</FACE>
```

```
<FACE XMLID="FTC501" NAME="Team" NAVIGATIONMODE="4" SPECIALTYPE="1"
ASPECTTYPE="32">
```

```
<VIEWER NAME="cdavies"/>
```

```
<VIEWER NAME="btrexler"/>
```

```
<VIEWER NAME="pames"/>
```

```
</FACE>
```

```
</PROJECT>
```

ASSEMBLY

```
<?xml version="1.0"?>
```

```
<!--Assembly Publishing XML-->
```

```
<FACE ID="1" NAME="Sliding Assembly" DESCRIPTION="SolidWorks Assembly"
NAVIGATIONMODE="2" SPECIALTYPE="4">
```

```
<INFOITEM NAME="Sliding Assembly Bundle" DESCRIPTION="SolidWorks
Assembly" DOCTYPE="3" TYPE="1" SOURCEREF="C:\Program
Files\SolidWorks98plus\SAMPLES\EXAMPLES\Dial Caliper\Sliding
Assembly.SLDASM" MASTERFILENAME="Sliding Assembly.SLDASM">
```

```
<CUSTOMPROP NAME="XMLRef" VALUE="Sliding Assembly"
DESCRIPTION="Unique name for republishing" TYPE="4"/>
```

```

<DEPENDENCY FILENAME="D:\Program
Files\SolidWorks98plus\samples\examples\Dial Caliper\Depth
Bar.SLDPRT"/>

<DEPENDENCY FILENAME="D:\Program
Files\SolidWorks98plus\samples\examples\Dial Caliper\Face
Plate.SLDPRT"/>

<DEPENDENCY FILENAME="D:\Program
Files\SolidWorks98plus\samples\examples\Dial Caliper\Dial Lock
Clamp.SLDPRT"/>
</INFOITEM>

<CUSTOMPROP NAME="XMLRef" VALUE="Sliding Assembly" DESCRIPTION="Unique
name for republishing" TYPE="4"/>

<LOOKGRAPHIC FILENAME="Sliding Assembly.SLDASM" ORIGINALREF="C:\Program
Files\SolidWorks98plus\SAMPLES\EXAMPLES\Dial Caliper\Sliding
Assembly.SLDASM"/>

<FACE ID="2" NAME="Depth Bar" DESCRIPTION="SolidWorks Part"
NAVIGATIONMODE="1" SPECIALTYPE="1">

    <INFOITEM NAME="Depth Bar:SLDPRT" DESCRIPTION="SolidWorks Part"
    DOCTYPE="2" TYPE="1" SOURCEREF="D:\Program
    Files\SolidWorks98plus\samples\examples\Dial Caliper\Depth
    Bar.SLDPRT" MASTERFILENAME="Depth Bar.SLDPRT">

        <CUSTOMPROP NAME="XMLRef" VALUE="Depth Bar"
        DESCRIPTION="Unique name for republishing" TYPE="4"/>

    </INFOITEM>

    <CUSTOMPROP NAME="XMLRef" VALUE="Depth Bar" DESCRIPTION="Unique
    name for republishing" TYPE="4"/>

    <LOOKGRAPHIC FILENAME="Depth Bar.SLDPRT" ORIGINALREF="D:\Program
    Files\SolidWorks98plus\samples\examples\Dial Caliper\Depth
    Bar.SLDPRT"/>

</FACE>

<FACE ID="3" NAME="Face Plate" DESCRIPTION="SolidWorks Part"
NAVIGATIONMODE="1" SPECIALTYPE="1">

    <INFOITEM NAME="Face Plate:SLDPRT" DESCRIPTION="SolidWorks Part"
    DOCTYPE="2" TYPE="1" SOURCEREF="D:\Program
    Files\SolidWorks98plus\samples\examples\Dial Caliper\Face
    Plate.SLDPRT" MASTERFILENAME="Face Plate.SLDPRT">

        <CUSTOMPROP NAME="XMLRef" VALUE="Face Plate"
        DESCRIPTION="Unique name for republishing" TYPE="4"/>

    </INFOITEM>

    <CUSTOMPROP NAME="XMLRef" VALUE="Face Plate" DESCRIPTION="Unique
    name for republishing" TYPE="4"/>

    <LOOKGRAPHIC FILENAME="Face Plate.SLDPRT" ORIGINALREF="D:\Program
    Files\SolidWorks98plus\samples\examples\Dial Caliper\Face
    Plate.SLDPRT"/>

</FACE>

</FACE>

```

XML CODE SAMPLES

CREATING AND INITIALIZING AN XML FILE

```
#include "FtcXMLInclude.h" // element and attribute names, enumerated types

. . .

CoInitialize(NULL); // called during application startup

. . .

// create XML parser
IXMLDOMDocumentPtr XMLDoc; // see MSDN library for full definition
HRESULT hr = XMLDoc.CreateInstance("Microsoft.XMLDOM");
if(FAILED(hr)) {
    return;
}

// initialize XML document
GetXMLDoc()->preserveWhiteSpace = _variant_t(true);

// set version info
IXMLDOMProcessingInstructionPtr version =
    XMLDoc->createProcessingInstruction(_bstr_t(_T("xml")),
        _bstr_t(_T(" version=\"1.0\"")));
XMLDoc->appendChild(version);

// set comment on origin
IXMLDOMCommentPtr commentNode = XMLDoc->createComment(_bstr_t(comment));
XMLDoc->appendChild(commentNode);

// create root node (PROJECT)
IXMLDOMNodePtr projNode = XMLDoc->createElement(_bstr_t(FD_XMLTAG_PROJECT));
XMLDoc->appendChild(projNode);

// create face node for project
IXMLDOMNodePtr faceNode = XMLDoc->createElement(_bstr_t(FD_XMLTAG_FACE));
projNode->appendChild(faceNode);

// set the name attribute for the new face
IXMLDOMAttributePtr attribute = XMLDoc->createAttribute(FD_XMLTAG_NAME);
attribute->Putvalue(_variant_t(_T("First Face")));
faceNode->attributes->setNamedItem(attribute);

// save xml document
XMLDoc->save(_T("c:\\temp\\mydoc.xml"));

. . .
CoUninitialize(); // called during application termination
```

SUMMITTING AN XML FILE TO THE API FROM SERVER

```
#include "FtcXMLInclude.h" // element and attribute names, enumerated types

. . .

CoInitialize(NULL); // called during application startup

. . .

// instantiate Authoring Engine
IAuthoringEnginePtr AE;
```

```

HRESULT hr = AE.CreateInstance(_T("ActiveProject.AuthoringEngine.1"));
try {
    // initialize AE on server
    AE->Init(_bstr_t(_T("")), _variant_t((short)FD_AEUseCollaborationServer));

    // log in as NT administrator to first project area of server
    // (collaboration manager and log in beyond the scope of this code)
    AE->CollaborationManager->Login(_bstr_t(_T("")),
        _bstr_t(_T("")), (short)0, (short)1);

    // set values for API call
    _bstr_t target; // assuming a project so leave blank
    IVariantDictPtr parameters; // create a parameters options list
    HRESULT hr = parameters.CreateInstance(
        _T("ActiveProject.VariantDict.1"));

    if(FAILED(hr))
        return;
    // set flag to generate web site after creating project
    parameters->Add(_bstr_t(_T("REGENWEBSITE")), _variant_t(_T("1")));

    // submit XML file to API
    AE->NewFrom(_variant_t(_T("c:\\temp\\mydoc.xml")),
        _variant_t(parameters.GetInterfacePtr()),
        target,
        FD_CpyPreserveXMLSourceDirectory);
}
catch(...) {
}

```